APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,483	07/18/2002	Bei-Chuan Chen	ASIP0003USA	9691

27765 7590 07/24/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION	LOVING, JARIC E	

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ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/064,483	CHEN ET AL.
	Examiner	Art Unit	
	Jaric Loving	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _04 May 2006_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _18 July 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This office action is responsive to Applicant's amendment received on May 4,

2006. Claims 1-12 are pending.

2.   Examiner has corrected mistakes of the figure citations.

3.   Applicant's arguments filed on May 4, 2006 have been fully considered, but they

are not persuasive.

Information Disclosure Statement

1.   The listing of references in the specification is not a proper information disclosure

statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other

information submitted for consideration by the Office, and MPEP § 609.04(a) states,

"the list may not be incorporated into the specification but must be submitted in a

separate paper." Therefore, unless the references have been cited by the examiner on

form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-4, 6-9, and 11-12 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Frank, Jr. et al., US 6,546,489 in view of Stevens US 2002/0133702.

In claim 1, Frank Jr. discloses a bootable software delivery device comprising:

a connection port for connecting the software delivery device to a computer

(Figure 3, item 426; col. 6, lines 32-51);

a microcontroller coupling the connection port for controlling the software delivery

device (Figure 3, items 432, 443; col. 5, lines 7-45; col. 6, lines 32-51 – two

embodiments are provided where a microcontroller or microprocessor accomplish the

same task); and

a disk drive coupling the microcontroller for storing a software (Figure 3, item

424; col. 6, lines 32-51);

wherein the microcontroller is so programmed that the software is executable by

the computer from the software delivery device (col. 5, line 31 – col. 6, line 14; col. 6,

lines 32-57 – disk drive can load memory image source and will only execute from the

drive).

Frank, Jr. teaches all of the claimed elements except Frank, Jr. fails to teach the

use of flash memory. Stevens teaches the use of flash memory as a nonvolatile

storage device (paragraphs [0042]-[0043]).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to recognize that it is advantageous for the software delivery device of Frank,

Jr. to also incorporate Steven's use of flash memory storage. It is for this reason that

one of ordinary skill in the art would have been motivated to enable Frank, Jr.'s secure

boot device with flash memory because it provides flexibility in the devices the CPU can

use to execute an initial set of instructions or to preserve data in the event of a power-

off condition (Stevens, paragraphs [0042]-[0043]).

In claim 2, Frank, Jr., as modified, discloses the software delivery device of claim 1 wherein the microcontroller prevents copying of the software from the flash memory of the software delivery device (Frank, Jr., col. 5, line 31 – col. 6, line 14; col. 7, lines 39-60 – microcontroller or microprocessor will prevent the memory image source from being copied off the disk unless booted from the drive).

In claim 3, Frank, Jr., as modified, discloses the software delivery device of claim 1 wherein the connection port is an integrated drive electronics (IDE) port (Frank, Jr., col. 4, lines 30-37; col. 6, lines 32-35).

In claim 4, Frank, Jr., as modified, discloses the software delivery device of claim 1 wherein the connection port is a small computer system interface (SCSI) port (Frank, Jr., col. 4, lines 30-37; col. 6, lines 32-35).

In claim 6, Frank, Jr. discloses a software delivery device comprising for providing software copy protection, the software delivery device comprising:

a connection port for electrically connecting the software delivery device to a computer (Figure 3, item 426; col. 6, lines 32-51);

a microcontroller, electrically connected to the connection port, in which an authentication program is installed for booting the computer from the software delivery device (Figure 3, items 432, 443; col. 5, lines 7-45; col. 6, lines 32-51; col. 7, lines 39 – col. 8, line 4 – verification code can be installed and sent on a remote computer system before access to the protected area is granted);

a disk drive electrically connected to the microcontroller, the disk drive

comprising a boot sector for booting the computer in accordance with the authentication

program (col. 5, line 31 – col. 6, line 14; col. 6, lines 32-57; col. 7, lines 39-60); and

a private program stored in the disk drive, the private program being executable

by the computer only after booting from the boot sector is performed (col. 6, lines 4-14 –

memory image will only boot after booting).

Frank, Jr. teaches all of the claimed elements except Frank, Jr. fails to teach the

use of flash memory and the authentication program instructing the microcontroller to

return a virtual boot sector. Stevens the use of flash memory (paragraphs [0042]-

[0043]) and the authentication program instructing the microcontroller to return a virtual

boot sector (paragraphs [0050] – [0051] and [0058] – [0061]). Stevens discusses a fail-

safe boot in paragraph [0051] that boots from a different drive, which is similar to

applicant's virtual boot sector and would only arise from commands in the BIOS.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to recognize that it is advantageous for the software delivery device of Frank,

Jr. to incorporate Steven's use of flash memory and an authentication program

instructing the microcontroller to return a virtual boot sector. It is for this reason that one

of ordinary skill would have been motivated to enable Frank, Jr.'s secure boot device

with flash memory because it provides flexibility in the devices the CPU can use to

execute an initial set of instructions or to preserve data in the event of a power-off

condition (Stevens, paragraphs [0042]-[0043]) and it would not only protect the software

on the device during normal system operations, but during the boot process (Stevens, paragraphs [0003]-[0007]).

In claim 7, Frank, Jr., as modified, discloses the software delivery device of claim 6 wherein the microcontroller prevents copying of the private program from the flash memory of the software delivery device (Frank, Jr., col. 5, line 31 – col. 6, line 14; col. 7, lines 39-60).

In claim 8, Frank, Jr., as modified, discloses the software delivery device of claim 6 wherein the connection port is an integrated drive electronics (IDE) port (Frank, Jr., col. 4, lines 30-37; col. 6, lines 32-35).

In claim 9, Frank, Jr., as modified, discloses the software delivery device of claim 6 wherein the connection port is a small computer system interface (SCSI) port (Frank, Jr., col. 4, lines 30-37; col. 6, lines 32-35).

In claim 11, Frank, Jr., as modified, discloses the software delivery device of claim 6 wherein the authentication program is stored in a read only memory of the microcontroller (Frank, Jr., col. 5, line 46 – col. 6, line 14).

In claim 12, Frank, Jr., discloses a method for protecting a software, the method comprising: providing a device for delivering the software, the device comprising a drive for storing the software, a connection port for connecting to a computer, and a microcontroller for executing the software with the computer via the connection port; and programming the microcontroller in such a way that the software is executable by the computer only from the device (Figure 3, items 424, 426, 443; col. 5, line 31 – col. 6, line 14; col. 6, lines 32-57).

Frank, Jr. teaches all of the claimed elements except Frank, Jr. fails to teach the

use of flash memory. Stevens teaches the use of flash memory as a nonvolatile

storage device (paragraphs [0042]-[0043]).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to recognize that it is advantageous for the software delivery device of Frank,

Jr. to also incorporate Steven's use of flash memory storage. It is for this reason that

one of ordinary skill in the art would have been motivated to enable Frank, Jr.'s secure

boot device with flash memory because it provides flexibility in the devices the CPU can

use to execute an initial set of instructions or to preserve data in the event of a power-

off condition (Stevens, paragraphs [0042]-[0043]).

4.   Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Frank, Jr. and Stevens, and further in view of Strom et al., US 2004/0003274.

In claims 5 and 10, Frank, Jr., as modified, teaches all of the elements of claims

1 and 6, respectively, but fails to teach the software delivery device where the

connection port is a universal serial bus (USB) port. Strom teaches utilizing a USB port

in a method of content protection (paragraph [0023]).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to recognize that it is advantageous for the software delivery device of Frank,

Jr. to incorporate Strom's use of a USB port. It is for this reason that one of ordinary

skill in the art would have been motivated to provide a USB port because it provides

another interface in which other types of computer readable media may be used (Strom,

paragraphs [0022]-[0023]).

Response to Arguments

5.   Regarding claims 1-12, Applicant argues claims 1 and 6 and states the rest of the claims follow based on dependency.

6.   Applicant argues that the Frank, Jr. reference does not disclose a "software delivery device" because the microcontroller is not part of the disk drive. The broadest reasonable interpretation of the claims will be given and no limitations from the specification will be read into the claims. In claim 1, lines 3-4, Applicant states "a microcontroller coupling the connection port for controlling the software delivery device", which Frank, Jr. discloses (col. 5, lines 7-45; col. 6, lines 32-51). The disk drive delivers software to the computer (col. 6, lines 46-51).

Applicant next argues that in the Frank, Jr. reference, "the disk drive is separated from the microcontroller by the very connection that would allow the combination to deliver software." The broadest reasonable interpretation of the claims will be given and no limitations from the specification will be read into the claims. In claim 1, line 5, Applicant states "a flash memory coupling the microcontroller for storing a software", which Frank, Jr. in combination with Stevens, discloses (Frank, Jr., col. 6, lines 32-51; Stevens, paragraphs [0042]-[0043]). Frank, Jr. provides a disk drive that is coupled to a microcontroller and the disk drive stores the software, which it delivers to the computer (col. 6, lines 46-51).

7.   In response to applicant's argument that the computer is the target for the software delivery device, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the

basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

8.   In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the microcontroller is a part of the disk (flash) drive; the disk drive should be connected to a computer so as to deliver software to said computer; a computer is the target for software delivery) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
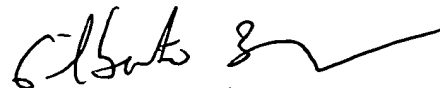
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaric Loving whose telephone number is (571) 272-1686. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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